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A F T E R N O O N      S E S S I O N

2:01 p.m.

02:01:12 4 THE VIDEO OPERATOR: We're back on  
02:01:16 5 the record. The time on the screen is 2:01:24.

6 J O H N M. W H I T M A N,  
7 resumed, having been previously duly sworn, was  
8 examined and testified further as follows:

9 CONTINUED EXAMINATION

02:01:20 10 BY MR. ROGERS:

02:01:24 11 Q. Good afternoon, Mr. Whitman.

02:01:28 12 A. Good afternoon. Alex, if I might,  
01:30 13 I'd just like to correct something I said  
02:01:32 14 earlier. It dawned on me during lunch that when  
02:01:34 15 we were working on a first draft of the  
02:01:34 16 affidavit, that in addition to the folks I  
02:01:36 17 already mentioned, that Dave Merrill was in that  
02:01:36 18 meeting.

02:01:38 19 ~~THE VIDEO OPERATOR: I'm sorry, we~~  
02:01:38 20 ~~have to go off the record.~~

21 (Discussion off the record.)

02:02:32 22 THE VIDEO OPERATOR: This is  
02:02:34 23 videotape number 3, the continuation of the  
02:02:38 24 deposition of Mr. Whitman. Today is August 14th,  
02:44 25 1995. The time on the screen is 2:02:55. You're

MANHATTAN REPORTING CORP.

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2 on the record.

3 Q. Good afternoon, Mr. Whitman.

4 A. Good afternoon, Alex. I'd just like  
5 to correct something from this morning's  
6 testimony, that during the preparation of the  
7 affidavit at the first meeting Mr. Dave Merrill  
8 was also present.

9 Q. Do you remember any specific input  
10 that Dave Merrill had to the draft?

11 A. No, I really don't.

12 Q. Other than the documents to which you  
13 earlier referred, the July 1995 data by R&D and  
14 the data by TLA stretching from '89 to '94, can  
15 you recall any other documents which you reviewed  
16 in the course of preparing the affidavit?

17 A. Specific documents, no. Recollection  
18 of specific data that I had seen in prior years  
19 from just a general standpoint, yes.

20 Q. And what was that other data?

21 A. The finished sheet nicotine content,  
22 alkaloid content of BL as well as the raw  
23 materials content.

24 Q. Was that on a report that's prepared  
25 regularly in the ordinary course of business?

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02:04:04 2 A. That was just from recollection of  
02:04:08 3 things like those blend component studies that I  
02:04:10 4 mentioned earlier and from special tests that  
02:04:14 5 might have been conducted by R&D but not on a  
02:04:18 6 frequent -- not on a regular basis, no.

02:04:20 7 Q. Do you remember roughly the time  
02:04:22 8 period, the dates of those tests?

02:04:26 9 A. No, I sure don't.

02:04:30 10 Q. And other than that additional source  
02:04:32 11 of material, can you recall any other documents  
02:04:32 12 that you reviewed?

04:38 13 A. No, I cannot.

02:04:42 14 REQ MR. ROGERS: Chip, with respect to  
02:04:44 15 the documents to which Mr. Whitman has referred,  
02:04:50 16 the TLA studies between '89 and '94 both for the  
02:04:54 17 RL and BL you may have produced them. They seem  
02:04:58 18 to fall within the discovery period and within  
02:05:00 19 the four corners of defendants' discovery  
02:05:02 20 requests as narrowed by the court. Could I ask  
02:05:08 21 you to check to see if you have produced that, if  
02:05:10 22 you could just simply provide us with the  
02:05:14 23 production numbers, and if you haven't produced  
02:05:16 24 them, could I ask that they be produced as  
05:16 25 quickly as possible.

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02:05:18 2 MR. NUNLEY: I'll check to see if  
02:05:20 3 they've been produced.

02:05:22 4 REQ MR. ROGERS: And with respect to the  
02:05:24 5 second set of documents that Mr. Whitman has  
02:05:28 6 referred to, the July 1995 data, that obviously  
02:05:34 7 falls outside the discovery period so I'm  
02:05:36 8 assuming that it wasn't produced to us before.  
02:05:38 9 Inasmuch as Mr. Whitman has testified today that  
02:05:42 10 he has relied on that data in the course of  
02:05:44 11 preparing the affidavit, I would request the  
02:05:46 12 production of those documents as well.

05:48 13 MR. NUNLEY: I hear your request.

02:05:54 14 REQ MR. ROGERS: And so as not to  
02:05:54 15 inconvenience Mr. Whitman in his normal course of  
02:06:00 16 business, if we can have that produced before we  
02:06:04 17 conclude tomorrow afternoon, we may not have to  
02:06:06 18 invite him back for another day of deposition.  
2:06:08 19 So I know that would be your hope and certainly  
2:06:12 20 it would be ours as well.

2:06:14 21 And then finally, with respect to  
2:06:18 22 this last set of data as well, the alkaloid  
2:06:22 23 content of the finished sheet of the BL, if  
2:06:24 24 that's been produced, if you could just identify  
6:26 25 the production numbers, and if not, produce

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them.

MR. NUNLEY: I'll check on it.

Q. Mr. Whitman, directing your attention back to Whitman Exhibit 2, the answers to, Philip Morris's answers to the first set of interrogatories, you had indicated that you hadn't seen that before but you had seen the addendum; is that correct?

A. That's correct.

Q. Do you recall being consulted in answering any of the questions that appear in this document?

A. Not to my recollection.

MR. ROGERS: Would you mark this as Exhibit 4.

(Whitman Exhibit 4 for identification, Philip Morris, Incorporated's supplemental answers to American Broadcasting Companies first set of interrogatories.)

Q. You've just been handed what's been marked as Whitman Exhibit 4 which is Philip Morris, Incorporated's supplemental answers to American Broadcasting Companies first set of interrogatories. Have you ever seen this

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document? While you're looking I'll give you my second question, which is were you consulted in providing answers to any of the questions you see in here?

A. I honestly didn't see this document and don't remember the questions that are in here. One or two of the questions are similar to the set of questions that I saw, but only one or two.

Q. Okay. If you'll turn to Page 4 of this exhibit, you'll see on there question number 4, and I'll just read it to you: "Describe in detail, step by step, each and everything that happens to, is done to, or that directly or indirectly affects the solubles produced during the reconstitution process, including without limitation tracing the course of the solubles, solvents, and both of their constituents from the point where they are present in the tobacco material through the end of the cigarette making." And the answer that Philip Morris provides is "This interrogatory's been limited by the court's discovery rulings on January 23rd, 1995. It is satisfied by the production of

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Philip Morris's 'RL process overview.' The RL  
process overview was delivered to counsel for  
defendants on January 31, 1995." Have you ever  
heard of the RL process overview?

A. I saw that document for the first  
time several days ago.

Q. In what context did you see that  
document?

A. When I was reviewing the  
confidentiality of said documents with counsel.

Q. I'm sorry, can you describe in more  
detail what you were doing?

A. We were looking at documents that  
pertained to the case as to whether or not they  
were considered to be confidential, especially  
from an external publication standpoint.

Q. I see. And was that the first time  
that you had ever seen the RL process overview?

A. Yes, sir.

Q. Had you ever heard of it before?

A. No, sir.

Q. Having now looked at it at that  
occasion, do you know who drafted it?

A. No, I do not.

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02:12:44 2 Q. Did the material in that RL process  
02:12:48 3 overview as you reviewed it appear true and  
02:12:48 4 accurate to the best of your knowledge?

02:12:50 5 MR. NUNLEY: Alex, I mean for the  
02:12:54 6 record I think the thing is 160 plus pages. Do  
02:12:56 7 you want him to affirm every sentence in there?

02:12:58 8 MR. ROGERS: That's a fair point.

02:13:04 9 Q. Did the RL process overview document  
02:13:06 10 that you reviewed in general terms accurately  
02:13:10 11 describe the nature of the operations at Park  
12 500?

13:14 13 A. I really only superficially looked at  
02:13:18 14 it, but for the few points that I did look at I  
02:13:20 15 didn't see anything that I viewed as being  
02:13:22 16 erroneous. Again, I only looked at it  
02:13:22 17 superficially.

02:13:24 18 Q. How were you able to make the  
02:13:28 19 determination as to the confidentiality of that  
02:13:28 20 document?

02:13:30 21 A. There were things described in there  
02:13:34 22 from an actual process standpoint, so.

02:13:36 23 Q. What specifically, can you recall?

02:13:40 24 A. If you'd show me the document I'd be  
13:40 25 happy to go through specifics.



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2:13:42 Q. But off the top of your head?

2:13:44 A. No, because it wasn't the only  
2:13:46 document I looked at.

2:14:02 Q. I understand. We were talking  
2:14:08 earlier about Bermuda Hundred. And there was a  
2:14:12 period of time between the time that production  
2:14:16 ceased of the de-nic product, which I gather was  
2:14:18 approximately 1990 or so; is that correct?

2:14:20 A. Somewhere during that calendar year,  
2:14:20 yes.

2:14:24 Q. And then 1993 which you described as  
14:30 the time on which it was "mothballed" or  
2:14:34 something like that. What, if anything, was  
2:14:36 occurring inside the Bermuda Hundred plant  
2:14:38 between 1990 and 1993?

2:14:40 A. For the first part of that time  
2:14:50 period we continued to run small scale production  
2:14:56 tests for R&D and subsequent to that we were  
2:15:00 actually doing design work to convert part of the  
2:15:02 manufacturing facility into an additional  
2:15:04 production facility for expanded tobacco.

2:15:14 Q. Do you know whether Philip Morris is  
2:15:18 today conducting any research on producing a  
15:20 denicotinized cigarette?

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02:15:24 2 A. No, I do not.

02:15:26 3 MR. NUNLEY: Alex give me a second,  
02:15:26 4 please.

02:15:42 5 (Discussion off the record.)

02:15:42 6 MR. NUNLEY: Thanks.

02:15:50 7 Q. Earlier this morning you drew an  
02:15:52 8 analogy in the denicotinized cigarette to  
02:15:56 9 caffeine and decaffeinated coffee. I gather that  
02:16:02 10 was an analogy that Frank Resnik first alerted  
02:16:02 11 you to; is that correct?

02:16:02 12 A. Yes.

02:16:16 13 Q. What reason, if any, was given as to  
02:16:16 14 why a cigarette should be produced without  
02:16:18 15 nicotine?

02:16:22 16 A. It was a niche type marketing  
02:16:30 17 concept, <sup>again similar</sup> ~~akin somewhat~~ to having decaffeinated  
02:16:30 18 coffee.

02:16:36 19 Q. I'm not sure I understand what you  
02:16:38 20 mean by akin to having decaffeinated coffee?

02:16:42 21 A. There might be a market for that type  
02:16:48 22 of product, that there had been a lot of  
02:16:58 23 publicity generated relative to nicotine and so  
02:17:00 24 forth, the same way that publicity had been  
02:17:04 25 generated with caffeine with coffee and that

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afforded you the opportunity, that process

afforded you the opportunity to do that.

Q. And what was the nature of the publicity that you recall relative to nicotine in around this time period?

A. I seem to recall some publicity in that regard by the then Surgeon General Koop, but that's really stretching the memory banks.

Q. So would those be health-related issues?

A. I'm really not sure I remember.

Q. Do you know whether there are any health consequences to inhaling nicotine?

A. No, I'm not aware of any.

Q. You're not aware of any health consequences or you're not --

A. Right.

Q. Do you still smoke today?

A. Yes, I do, occasionally.

Q. And we talked earlier today as well about some of the flexibility advantages I think you described them as, with the RL process as opposed to BL, one of which was the ability to remove compounds. And I think one of those

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compounds you identified was potassium nitrate?

A. That's correct.

Q. And you indicated that in the BL  
process at one point you were able to, Philip  
Morris was able to remove potassium nitrate by  
washing the dry raw materials?

A. Specifically the Burley stems.

Q. Right. Could Philip Morris have just  
as easily washed the dry raw materials in the RL  
process to remove potassium nitrate?

MR. NUNLEY: Objection; calls for  
speculation.

A. I mean physically can you do that?  
Probably, sure.

Q. What I'm getting at is I'm just  
trying to understand what you mean by a  
flexibility advantage. If you're able to remove  
nitrates by washing, what advantage, if any, is  
there to removing nitrates in the RL process  
through the centrifuge?

A. Yeah. It's a production yield  
question. By washing the Burley stems you wash  
all of the other soluble material out to a large  
extent.  
~~extent.~~

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2:19:50 2 In the Park 500 denitration process,  
2:19:54 3 the centrifugation process you referred to  
2:19:58 4 earlier, there are small amounts of solubles that  
2:20:00 5 are lost, but it's very specific to removing the  
2:20:04 6 potassium nitrate, so there's less total yield  
2:20:06 7 loss from that process.

2:20:10 8 Q. I see. You can selectively remove  
2:20:12 9 the nitrates more effectively in the RL process  
2:20:14 10 as opposed to the BL?

2:20:16 11 A. With the specific process you  
2:20:16 12 referred to, correct.

2:20:20 13 Q. Okay. And you mentioned that washing  
2:20:36 14 the dry raw materials resulted in loss of all the  
2:20:38 15 other soluble materials?

2:20:40 16 A. All is probably too strong a word. I  
2:20:42 17 don't remember the exact number. It's somewhere  
2:20:44 18 around 75 percent.

2:20:46 19 Q. Of the soluble material?

2:20:48 20 A. Total soluble material from the  
2:20:50 21 Burley stems only.

2:20:50 22 MR. NUNLEY: That's right. You've  
2:20:52 23 referred to it as raw materials. It's a specific  
2:20:54 24 component of the raw materials.

2:20:56 25 Q. The Burley stems are the only raw

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material in the BL process that were washed?

A. That is a correct statement.

Q. And the washing process resulted in a 75 percent reduction of the soluble content of the Burley stems?

A. That is also a correct statement.

Q. And among the solubles that were lost was nicotine?

A. It's water soluble, so yes.

Q. So is it correct to conclude therefore that roughly 75 percent of the nicotine would be removed in washing the Burley stems in the BL process?

MR. NUNLEY: Objection; calls for speculation.

A. I didn't specifically see data in that regard.

Q. But based upon your knowledge, I'm not asking you to speculate, based upon your knowledge is that a true statement or accurate statement?

A. Again, I didn't see data in that regard.

Q. When you gave me --

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02:21:56 2 A. It would be strictly an assumption  
02:22:00 3 based on the fact that nicotine is water soluble,  
02:22:04 4 if the Burleys, if the <sup>solubles</sup> ~~stem~~ <sup>Burley stems</sup> in ~~Burleys~~ are water  
02:22:06 5 soluble, so it's an assumption on my part that  
02:22:08 6 sure, you would see that same 75 percent  
02:22:10 7 reduction. Keeping in mind again that Burley  
02:22:12 8 stems are only approximately 33 percent of the  
02:22:14 9 infeed material to BL.

02:22:22 10 Q. Are they the single largest infeed  
02:22:24 11 material to BL?

02:22:32 12 A. Of an individual component as  
02:22:36 13 opposed -- for example, see if you group class  
02:22:38 14 tobaccos as a component then the answer to that  
02:22:40 15 question is no, they're not, class tobaccos are  
02:22:42 16 the largest single component.

02:22:44 17 Q. I'm sorry. I meant as an individual  
02:22:44 18 component?

02:22:46 19 A. As opposed to class 1, class 2.

02:22:48 20 Q. Correct.

02:22:50 21 A. Then that's probably a true  
02:22:50 22 statement.

02:23:00 23 Q. During the course of your work in New  
02:23:02 24 York, I apologize for jumping around, these are  
02:23:06 25 some things that we looked over this morning I

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want to think about some more. During the course of your tenure in New York working on capital appropriation requests, would those have included capital appropriation requests for both the RL and the BL plant?

A. Not for the entire plant.

Q. No, no.

A. They were already in operation. You mean improvement, different --

Q. Right.

A. Yes.

Q. Do you recall during that time period whether a new feeder was installed in the BL plant?

A. I can't honestly recall.

Q. Do you know whether since the time that you were plant manager of BL plant any new feeders have been installed?

MR. NUNLEY: For the record, what is that time frame?

Q. I believe you were manager of the BL process August of '85 to January of '88. So I want to start from August of '85 to the present. Do you know of any feeder that's been installed



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02:24:26 2 in the BL plant?

02:24:32 3 A. We revamped the entire Burley stem  
02:24:36 4 infeed system, modernized it, replaced used  
02:24:36 5 equipment.

02:24:36 6 Q. When did that occur?

02:24:40 7 A. Alex, I want to tell you it was  
02:24:46 8 sometime around '86 or '87, but that's strictly  
02:24:46 9 from memory.

02:24:56 10 Q. The documents that you've described  
02:25:06 11 in your preparation for the affidavit data  
02:25:10 12 concerning alkaloid measurements, do you know of  
25:12 13 any other documents not that you relied on for  
02:25:12 14 purposes of the affidavit, but any other  
02:25:16 15 documents at Philip Morris that provide data on  
02:25:20 16 alkaloid tests of RL?

02:25:28 17 A. Not that I can recall.

02:25:34 18 Q. If you'll turn to Page 11 of your  
02:25:40 19 affidavit which is Whitman Exhibit 3.

02:25:42 20 A. I'm sorry, which page, Alex?

02:25:44 21 Q. Page 11.

02:25:44 22 A. Yes, sir.

02:25:50 23 Q. You'll see paragraph 23 and I want to  
02:25:52 24 ask you about the second sentence. I'll just  
25:58 25 read the first two: "No nicotine from any source

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is used to 'spike' or 'fortify' Philip Morris's RL. The only nicotine in the RL sheet comes from the tobacco materials that are used to make the sheet. Indeed, during the formation of the RL sheet approximately 15 to 20 percent of the nicotine that was naturally found in the tobacco materials used to make the sheet is lost." First I want to ask you why you've placed in quotation marks the words spike or fortify in the first sentence?

A. If my memory serves me correctly, the word spike was specifically used in the Day One broadcast, if my memory serves me correctly, added to, spiked.

Q. And how do you know that?

A. From recollection of the broadcast.

Q. From watching the broadcast?

A. Yes, sir.

Q. Have you since watching the broadcast reviewed a transcript of that broadcast?

A. No, I've not.

Q. And you just were testifying as to the word spike. How about the word fortify that you also have in quotes?

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02:27:14 2 A. Same -- same comment applies.

02:27:16 3 Q. Is it your recollection both words  
02:27:16 4 were used in the broadcast?

02:27:22 5 A. In the context of being added to.

02:27:24 6 Q. I'm not sure I understand.

02:27:26 7 A. In other words, I'm not sure whether  
02:27:30 8 the exact word's spike or fortified, but  
02:27:32 9 additional quantities of nicotine were added. I  
02:27:34 10 can't remember the exact word that was used.

02:27:40 11 Q. What do you mean by additional  
02:27:42 12 quantities of nicotine were added?

02:27:46 13 A. Outside of the context of the raw --  
02:27:48 14 of the nicotine content that would be in the raw  
02:27:54 15 materials, that additional quantities of nicotine  
02:27:56 16 as some form of additive were added to the  
02:27:58 17 product.

02:28:00 18 Q. Okay. And turning to the second  
02:28:02 19 sentence, what's the basis of your statement that  
02:28:06 20 approximately 15 to 20 percent of the nicotine  
02:28:10 21 that was naturally found in tobacco materials  
02:28:10 22 used to make the sheet is lost?

02:28:14 23 A. First of all, if you take a look at  
02:28:16 24 the process itself going back to almost the same  
02:28:18 25 type of conversation that we had relative to the

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Burley stems, nicotine is water soluble and approximately 15 to 20 percent of the total solubles at Park are lost. So just from an assumption part of the process you would assume that that would be the loss. I've also seen specific data run by R&D testing that confirms that fact.

Q. What specific data confirms the 15 to 20 percent figures that you have here in paragraph 23?

A. Any of the data that we referred to before, but specifically the data from the July time period I remember specifically and I remember the numbers.

Q. So when I look at those documents I'll be able to see the tracking of the 15 to 20 percent loss?

A. Yes, sir.

Q. And that data is generated, I take it, by measuring the nicotine content of the raw materials and then the nicotine content of the finished sheet; is that correct?

A. The dry weight basis alkaloid content of both of those.

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02:29:34 2 Q. Okay. And as part of your earlier  
02:29:42 3 answer you said, you likened it to our  
02:29:44 4 conversation about the Burley stems, and you said  
02:29:46 5 so just from an assumption part of the process  
02:29:50 6 you would assume that that would be the loss,  
02:29:54 7 meaning the 15 to 20 percent, because there's 15  
02:29:58 8 to 20 percent of the total solubles at Park 500  
02:29:58 9 lost?

02:29:58 10 A. Correct.

02:30:02 11 Q. And what you're testifying to this  
02:30:04 12 afternoon is that there was both an assumption  
30:06 13 and that that assumption was confirmed by the  
02:30:08 14 data that you consulted?

02:30:08 15 A. That's correct.

02:30:12 16 Q. Is that the first data you had seen  
02:30:16 17 on nicotine loss in the RL process?

02:30:18 18 A. No.

02:30:22 19 Q. Did the information in this data  
02:30:24 20 comport with what you had previously understood  
02:30:26 21 the nicotine loss to be?

02:30:28 22 A. Agree with what I -- yes.

02:30:30 23 Q. Because I take it you wouldn't say  
02:30:32 24 the same -- you wouldn't make the same  
30:36 25 assumption, say, about nitrates, nitrates are a

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02:30:38 2 soluble material, correct?

02:30:38 3 A. Yes.

02:30:42 4 Q. But greater than 15 to 20 percent of  
02:30:46 5 the nitrates are lost in the Park 500 even though  
02:30:54 6 the total soluble loss is 15 to 20 percent?

02:30:56 7 MR. NUNLEY: When you say loss, are  
02:30:58 8 you including in that the denitration process?

02:31:00 9 MR. ROGERS: That's what I'm  
02:31:02 10 suggesting, yes.

02:31:02 11 MR. NUNLEY: But that's really not a  
02:31:04 12 process loss. I wouldn't consider it a process  
31:06 13 loss.

02:31:06 14 MR. ROGERS: What would you call it?

02:31:08 15 MR. NUNLEY: It doesn't matter what I  
02:31:12 16 would call it. What you called it is erroneous.

02:31:12 17 Q. What would you call it?

02:31:16 18 A. It's an intentional step to remove  
02:31:18 19 that product, process -- to remove that product,  
02:31:26 20 that compound from the product, so consequently  
02:31:28 21 it's not a processes lost, it's an intentional  
02:31:30 22 process stage.

02:31:34 23 Q. Right. But that reduction in  
02:31:40 24 nitrates also means a reduction in the total  
31:42 25 soluble level because nitrates are a soluble?

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A. Yeah, I would agree with that statement.

Q. What percentage of the nitrates are removed?

A. It varies, Alex, by what the content of the raw materials are and the raw materials in that being <sup>vary</sup> ~~very~~ substantially crop year to crop year because of agricultural conditions. So it really is a context of the fact that we take it down to a less than level of nitrate nitrogen in the finished sheet, but that percentage of what's removed really varies significantly.

Q. But whatever quantity of nitrates are removed would count in the reduction in total solubles? Do you understand?

A. Right, correct.

Q. So when you say 15 to 20 percent of the total solubles are lost included within that 15 to 20 percent are all the nitrates?

A. Yes.

Q. What percentage, on average, of the solubles would the nitrates comprise?

A. Ooh, I really can't answer that one sitting here. Again, that would vary with what's

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in the raw materials, but I can't even remember a number sitting here.

Q. 50 percent?

A. Oh, no, no, no.

Q. 10 percent?

A. I really don't know. I'd have to go get data and do a couple calculations. I really can't give you an answer to that sitting here.

Q. Let's stick with paragraph 23 that you have in front of you. You refer to two separate factors to which you attribute the nicotine lost. One is process losses which you describe as "principally during sheet formation, drying and evaporation," and the second I find in paragraph 23 is disposal of what you refer to as a surplus of tobacco solubles. Have I read that accurately that those are the two instances in which nicotine is lost?

A. Yeah. You left out the fact that part of the reason for why this surplus is there is because of the addition of those other materials. But substantially yes, that's correct.

Q. And your testimony in this affidavit



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02:34:52 2 is as to nicotine content by weight; is that  
3 correct?

02:35:02 4 A. Right, correct. Again, alkaloid on a  
02:35:02 5 dry weight basis.

02:35:10 6 Q. Right. So you wouldn't know whether  
02:35:14 7 or not this reduction in nicotine translates into  
02:35:18 8 the same reduction in the nicotine delivery if  
02:35:22 9 you smoked the recon?

02:35:24 10 MR. NUNLEY: Objection as to form.

02:35:24 11 Q. Do you understand what I'm saying?  
02:35:28 12 I'm trying to see if there's a one-to-one  
02:35:30 13 correlation as you understand it between nicotine  
02:35:32 14 content by weight which is your testimony here in  
02:35:36 15 this affidavit, and nicotine delivery to the  
02:35:36 16 smoker upon combustion?

02:35:38 17 A. I have no idea what that translates  
02:35:44 18 to. All I can speak to is the RL finished  
02:35:44 19 product itself.

02:35:46 20 Q. And the content of the nicotine in  
02:35:50 21 that finished product. So you wouldn't know, for  
02:35:56 22 instance, if there was a 10 percent reduction in  
02:35:58 23 the weight of the finished product, whether that  
02:35:58 24 would result in a 10 percent reduction in  
02:36:02 25 nicotine delivery upon combustion of that recon;

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02:36:04 2 is that correct? You wouldn't know that?

02:36:06 3 A. Of a hundred percent recon?

02:36:06 4 Q. Right.

02:36:08 5 A. No, I mean in either case the answer  
02:36:08 6 is no.

02:36:22 7 Q. Have you ever heard the term nicotine  
02:36:22 8 yield?

02:36:28 9 A. No.

02:36:30 10 Q. How about nicotine absorption?

02:36:36 11 A. Only with regard to the ART process.

02:36:40 12 Q. What specifically?

36:42 13 A. The absorption of nicotine by the  
02:36:46 14 absorber stems during the ART process.

02:36:48 15 Q. I see, on the process side?

02:36:48 16 A. Yes.

02:36:50 17 Q. Okay. Have you ever heard the term  
02:36:54 18 nicotine absorption used to refer to the nicotine  
02:36:56 19 that the smoker gets upon inhaling the cigarette?

02:36:58 20 A. No, I have not.

02:37:02 21 Q. How about the expression  
02:37:06 22 nicotine-to-tar ratio, are you familiar with  
02:37:06 23 that?

02:37:06 24 A. Yes.

37:14 25 Q. What's the nicotine-to-tar ratio?

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A. It's simply a quotient. Normally when I've heard it it's the other way around, tar-to-nicotine ratio.

Q. Is that a quotient that Philip Morris measures on all of its cigarettes?

A. No, not -- again, not that I know of since I'm very unfamiliar with the product side in that context. Most of those discussions centered around the stuff relative, again, to the alkaloid reduced tobacco and cigarettes therefrom.

Q. Earlier you were describing a discrepancy in data between the Tobacco Institute's tests and Philip Morris R&D's tests with respect to nicotine. Would you remind me whether --

MR. NUNLEY: Objection. That mischaracterizes his testimony. He told you twice, I think, he wasn't sure whether the discrepancy was as to the tar levels or as to the nicotine levels.

Q. Is that an accurate --

A. That's correct.

Q. Do you know whether there were any

1 Whitman - Highly Confidential - Trade Secret  
02:38:30 2 tests conducted by the Tobacco Institute on  
02:38:30 3 nicotine?

02:38:36 4 A. My recollection is is that they  
02:38:38 5 normally tested both tar and nicotine, yes.

02:38:40 6 Q. And do you know whether those tests  
02:38:44 7 were the nicotine content by weight as you've  
02:38:52 8 done in your affidavit or nicotine delivery by  
02:38:54 9 virtue of the FTC machine or any other machine?

02:38:58 10 A. As far as I remember, the only  
02:39:00 11 testing they did was the delivery of cigarettes  
02:39:02 12 by FTC.

39:12 13 Q. The tests on which you've based your  
02:39:16 14 affidavit were done on nicotine content of the  
02:39:18 15 dry raw materials and the finished sheet. Are  
02:39:24 16 you aware of any tests for alkaloids that are  
02:39:28 17 conducted at any interim point in the RL process  
02:39:30 18 between the time that the raw materials comes in  
02:39:32 19 through the front door and the finished sheet  
02:39:34 20 goes out the back?

02:39:38 21 A. On occasion we have checked the  
02:39:42 22 soluble -- the solubles content and/or the  
02:39:44 23 nicotine content of --

02:39:44 24 Q. What stage is that?

39:50 25 A. RBW, SBW, WEL. It's referred to in

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another part of the affidavit.

Q. Why would you test the nicotine content of the RBW?

MR. NUNLEY: Well, I believe his answer was as to checking the soluble content. "On occasion we would check the soluble content."

Q. And/or the nicotine?

A. And/or the nicotine.

Q. Let's focus on the nicotine content.

A. We specifically checked it to confirm what the nicotine levels were in those recycled water streams.

Q. And when were those tests conducted?

A. The set of data that I saw again was this July data.

Q. Do you know why those tests were conducted?

A. Because of the inference that recycled water contributes to the nicotine content of the finished sheet.

Q. I see. So an issue raised in this litigation?

A. Yes.

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MR. NUNLEY: In July of this year.

THE WITNESS: Right.

Q. And does the same hold true with respect to any tests for nicotine content of the SBW and WEL?

A. Yeah, all three of them, sure.

Q. And prior to this litigation were you aware of any tests done on the nicotine content of SBW?

A. I'm really not, no.

Q. How about tests on the nicotine content of WEL?

A. Not to my recollection.

Q. How about tests on the nicotine content of SEL?

A. Not to my recollection.

Q. So other than this data of July 1995, are you aware of any tests into the nicotine content of any material in the RL process?

A. Other than the raw materials?

Q. Right.

A. No, sir.

MR. ROGERS: Would you mark this as Exhibit 5.

1 Whitman - Highly Confidential - Trade Secret

2 (Whitman Exhibit 5 for  
3 identification, memorandum, to M.B. Maher, from  
4 W.H. Bailey, dated October 31, 1989, production  
5 numbers 2030351524 through 2030351527 and PA  
6 146172 through PA 14175.)

02:42:32 7 Q. You've just been handed, Mr. Whitman  
02:42:36 8 what's been marked as Whitman Exhibit 5, which is  
02:42:38 9 a memo from W.H. Bailey, Jr., to M.B. Maher,  
02:42:46 10 dated October 31, 1989, subject matter "Wiegand  
02:42:50 11 systems subjective evaluation." The Philip  
02:43:06 12 Morris production numbers are 2030351524 to  
13 2030351527. The corresponding production,  
14 defendants' production numbers are PA 146172 to  
02:43:08 15 PA <sup>146175</sup>~~14175~~. I'll direct your attention immediately  
02:43:12 16 to the last page you'll see your name on the cc  
02:43:18 17 list. Do you recall receiving a copy of this  
02:43:24 18 memo?

02:43:26 19 MR. NUNLEY: While the witness is  
02:43:28 20 looking at the memo let me just say for the  
02:43:30 21 record that it bears a confidential stamp.

02:43:54 22 A. Yeah, in general I remember it.

02:43:56 23 Q. And if you'd turn on the first page  
2:44:00 24 to the objective statement and I'll read it,  
14:02 25 "Qualify the subjectives and operation of the

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new two-stage evaporator system prior to commercial operation." What do you understand by the expression "qualify the subjectives of this two-stage evaporator system"?

A. You're changing the equipment within the process, specifically the type of evaporator used. Different evaporating techniques can affect what's removed. Does this produce the exact same subjective response as the existing wiped film evaporators that were in previous use or are in use at Park 500.

Q. I guess I'm wondering what you mean by subjective response. We used subjective earlier today to refer to the taste, if you will, of the de-nic product. Is that the same --

A. Yes.

Q. -- definition you mean here?

A. Yes, it is.

Q. How would you test the subjectives of an evaporator system?

A. Let me see if I can -- if you will refer to Page 3 I believe it describes that for you right on that page.

Q. I see. So it's a comparison of



1       Whitman - Highly Confidential - Trade Secret  
02:45:42 2       cigarettes made both with the old evaporator  
02:45:46 3       system and this Wiegand evaporator system; is  
4       that correct?

02:45:48 5       A.       Right. Again, in the context of  
02:45:52 6       exactly what you see described here are the types  
02:45:54 7       of cigarettes that will be made.

02:45:58 8       Q.       When it says R&D number 1 there in  
02:46:02 9       the middle of the page, this third page of the  
02:46:04 10       document, "R&D will make test and control  
02:46:08 11       cigarettes from both flavors for immediate  
02:46:12 12       analysis subjective smoking." Do you understand  
46:16 13       that to mean cigarettes<sup>solely</sup> containing reconstituted  
02:46:18 14       tobacco? I'm sorry, I can see the document  
02:46:22 15       myself. There's a comparison in RL level. I  
02:46:24 16       apologize. That's a silly question.

02:46:24 17       A.       No problem. No problem.

02:46:26 18       Q.       Let's look at the bottom of the page  
02:46:32 19       under the subheading "R&D lab support." Item  
02:46:36 20       number 1 is sheet chemical analysis, A, acetic  
02:46:42 21       acid, B, formic acid, C, phosphorous, D, total  
02:46:44 22       reducing sugars, E, alkaloids. Are those all  
02:46:50 23       parameters that influence the subjectives that  
02:46:52 24       are referred to in this document?

46:58 25       A.       They could. I'm assuming they

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02:47:04 2 could. Do they necessarily constitute everything  
02:47:12 3 that would affect subjectives, probably not.  
02:47:14 4 Again, as you go back to a previous statement in  
02:47:18 5 the affidavit, there's just myriads of compounds  
02:47:20 6 that are in tobacco solubles. That's the part  
02:47:24 7 that you're affecting by changing the  
02:47:28 8 evaporator. I mean the proof is in the  
02:47:30 9 subjective testing.

02:47:30 10 Q. Do you recall what the outcome of  
02:47:36 11 this project was? Has the Wiegand system been  
02:47:36 12 implemented?

47:38 13 A. Yeah, only on one line.

02:47:42 14 Q. Which line is that?

02:47:44 15 A. Line 3.

02:47:48 16 Q. Why wasn't it installed on lines 1 or  
02:47:48 17 2?

02:47:54 18 A. Its mechanical reliability is less  
02:47:56 19 than what the vendor told us it would be.

02:48:08 20 Q. The reference to alkaloids on the  
02:48:12 21 bottom of that third page, is there a target  
02:48:16 22 alkaloid level for the finished RL sheet?

02:48:18 23 A. No, there is not.

02:48:20 24 Q. Would the alkaloid level, though, be  
48:24 25 a factor in determining subjective quality?

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02:48:28 2 A. I really can't answer that question.  
02:48:30 3 You have to talk to the -- our product  
02:48:34 4 development folks. It's common to check any of  
02:48:38 5 those types of compounds there, but again,  
02:48:42 6 whether or not they specifically like phosphorous  
02:48:44 7 I can't answer the question any more from that  
02:48:46 8 standpoint than I can from the alkaloid  
02:48:48 9 standpoint.

02:48:54 10 Q. You see the reference to acetic acid?

02:48:54 11 A. Yes.

02:48:56 12 Q. Is that naturally found in the raw  
48:58 13 materials in the RL process or is that an  
02:48:58 14 additive?

02:49:06 15 A. It's not a specific additive.

02:49:06 16 Q. Do you know whether it's naturally  
02:49:06 17 found in tobacco?

02:49:08 18 A. I'm really not sure.

02:49:10 19 Q. How about formic acid?

02:49:12 20 A. Same thing applies there. It's not  
02:50:00 21 an additive.

02:50:02 22 ~~MR. ROGERS: Would you mark this as~~  
02:50:02 23 ~~Exhibit 6.~~

24 (Whitman Exhibit 6 for  
25 identification, memorandum, to distribution, from

1       Whitman - Highly Confidential - Trade Secret  
2       Bobbi Jeter, dated April 21, 1992, production  
3       numbers 2030961055 through 2030961060 and PA  
4       473457 through PA 473462.)

02:50:04 5           Q.       You've just been handed what's been  
02:50:06 6       marked as Whitman Exhibit 6, which is a document  
02:50:10 7       entitled "Philip Morris total quality assurance  
02:50:14 8       facility." It's a memo from Bobbi Jeter to  
02:50:18 9       distribution. I'll direct you immediately to  
02:50:22 10       your name under Park 500 towards the bottom of  
02:50:46 11       the first page. The production numbers are  
12       2030961055 through 2030961060, and the  
13       defendants' production numbers are PA 473457  
02:50:48 14       through PA 473462. Do you recall receiving a  
02:50:52 15       copy of this document? It is dated April 21,  
02:50:54 16       1992.

02:50:56 17           MR. NUNLEY: Again for the record I  
02:51:00 18       would note that this one bears a trade secret  
02:51:00 19       designation.

02:51:12 20           A.       Yeah, I believe I saw that report,  
02:51:12 21       yes.

02:51:14 22           Q.       Who was Bobbi Jeter?

02:51:24 23           A.       It's really straining the memory  
02:51:28 24       banks. I believe she at the time was an employee  
02:51:30 25       of the tobacco quality assurance facility.

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02:51:32 2 Q. What is the tobacco quality assurance  
02:51:32 3 facility?

02:51:36 4 A. You'll really have to check with the  
02:51:40 5 QA folks on that one. It's not something that  
02:51:44 6 reports to the processing plants and I'm not  
02:51:50 7 really familiar with their organization and I  
02:51:54 8 ~~wouldn't~~ <sup>couldn't</sup> even tell you who they come under. But  
02:51:58 9 they do routine testing of various materials.

02:52:02 10 Q. And it's your understanding that  
02:52:04 11 Bobbi Jeter works within that facility?

02:52:06 12 A. At the time that this occurred, yes.

02:52:08 13 Q. Is that facility still in existence  
02:52:08 14 today?

02:52:08 15 A. Yes.

02:52:12 16 Q. And you said that you weren't sure  
02:52:16 17 who they came under. Do you know whether it's  
02:52:16 18 part of R&D?

02:52:18 19 A. I really don't know.

02:52:18 20 Q. But it's certainly not part of the  
02:52:20 21 Richmond processing plant?

02:52:20 22 A. No, it is not.

02:52:22 23 Q. And at the time of this document,  
02:52:24 24 April 21st, 1992, am I right that you were the  
02:52:26 25 site manager of Park 500?

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2:52:28 2 A. That's correct.

2:52:32 3 Q. And this, the subject matter of this  
2:52:40 4 document is first quarter 1992 PPQA publication.  
2:52:44 5 Do you know what PPQA stands for?

2:52:48 6 A. No, I really don't.

2:52:54 7 Q. If I said primary product quality  
2:52:56 8 assurance would that ring a bell?

2:52:58 9 A. It sure doesn't to me.

2:53:02 10 Q. Do you remember receiving reports of  
2:53:04 11 this nature on a quarterly basis?

2:53:12 12 A. Not of any recent vintage. I mean  
53:14 13 having shown me this report do I remember seeing  
2:53:18 14 this specific report or one like it the answer is  
2:53:22 15 yes. Have I seen any recent reports like this  
2:53:24 16 the answer is no, not to my recollection.

2:53:30 17 Q. I didn't mean to necessarily ask you  
2:53:34 18 about your recent receipt, but rather whether  
2:53:36 19 this is a report that you recall around this time  
2:53:38 20 of April '92 being prepared on a quarterly basis?

2:53:46 21 A. I'm just honestly not sure, Alex,  
2:53:48 22 whether I ever received any other report but this  
2:53:48 23 one.

2:53:50 24 Q. Okay, that's fair. If you'll turn to  
54:00 25 the final page of this document, the second half

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of the page, and I'm on PA 473462, reads, "First quarter 1992 total alkaloids summary," and then it appears to provide quarterly data from the second quarter of 1991 to the first quarter of 1992 for the total alkaloid content of the RLB and the RLTC. Do you recall seeing this data?

A. I don't remember that specific data. I mean I remember seeing the report.

Q. Why are total alkaloids measured on RLB or RLTC?

MR. NUNLEY: Objection unless he made the decision to measure them. It calls for speculation.

A. I really don't know the answer to that question. I really don't.

Q. Looking at the data for this four quarter period, it appears in each quarter that the RLTC has a higher total alkaloid level every time than the RLB. Does that surprise you?

A. Probably not.

Q. Why would the RLTC have a higher total alkaloid level than the RLB?

A. As a quick calculation, the fact that the RLB is more diluted with extra additives, I

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believe it references that in the affidavit relative to the total additive package that's put into RLB, so there's more of a dilution effect of those other soluble components that are added to B as opposed to TC.

Q. What's the difference between RLB and RLTC?

A. Basically the flavor systems, the flavor system humectant preservative package, if you will.

Q. But you could use the same blend of raw materials to produce RLB and RLTC?

A. Yes, sir, you could.

Q. So the only difference would be these additives you've described?

A. Yes, sir.

Q. And are there some additives that are in both RLB and in RLTC?

A. Yes, sir. The humectant -- humectants and preservative, preservatives are the same.

Q. Do you recall the specific names of any of those humectants or preservatives?

A. The humectants are, again this is



1       Whitman - Highly Confidential - Trade Secret  
2       highly confidential trade secret information in  
3       this particular case, propylene glycol and  
4       glycerine.

5           Q.       Why is propylene glycol added?

6           A.       It's a humectant. It aids in the  
7       moisture retention of the sheet and in the  
8       pliability of the sheet when it's processed.

9           Q.       Do you have the same answer for why  
10       glycerine is added?

11          A.       Yes, sir.

12          Q.       Do you know if there's any impact on  
13       nicotine delivery through the addition of  
14       propylene glycol? And by nicotine delivery I  
15       mean upon combustion?

16          A.       I have no idea of that.

17          Q.       Same question with respect to the  
18       addition of glycerine, do you know whether  
19       glycerine has any effect on the nicotine  
20       delivery?

21          A.       I would have no idea.

22          Q.       Those were two components that you  
23       described as being in both RLB and RLTC. Are  
24       there any other ingredients that are common to  
25       both?

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02:58:14 2 A. The preservative system is also  
02:58:22 3 common to both. Potassium sorbate is added to  
02:58:24 4 both and paraben is added to both.

02:58:30 5 Q. Can you think of any other  
02:58:34 6 ingredients that are common to both RLB and RLTC?

02:58:38 7 A. Not that I recall.

02:58:44 8 Q. How about ingredients that are  
02:58:46 9 different, is there anything in RLB that's not in  
02:58:48 10 RLTC?

02:58:50 11 A. From an additive standpoint?

02:58:50 12 Q. Yes.

58:50 13 A. Yes.

02:58:56 14 Q. What are those things?

02:59:02 15 A. Diammonium phosphate is added to B.  
02:59:16 16 Urea is added to B, Isosweet is added to B and  
02:59:20 17 Jono and M10 are added to B.

02:59:24 18 Q. What's M10?

02:59:28 19 A. It's a substitute for Cochise, it's a  
02:59:28 20 liquid substitute.

03:00:02 21 Q. Do the alkaloid levels here, is that  
03:00:06 22 roughly what they are generally somewhere  
03:00:12 23 between, say, .68 and .93?

03:00:14 24 MR. NUNLEY: Objection as to form.  
00:20 25 When you say -- are you talking about for RLB and

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RLTC?

MR. ROGERS: Yes.

Q. I'm talking about just RL sheet generally, those alkaloid levels are those roughly what you understand to be the, on average, the alkaloid levels of the RL sheet?

A. I'll tell you, I have a question relative to the report that I really don't remember and that without that I'm not really sure. One sec. It really doesn't state the basis in here, Alex, as to whether this is a dry weight or a wet weight basis.

Q. Would that make a difference?

A. Sure.

Q. Describe it.

A. Well, the wet weight basis has water included and dry weight basis does not. So if the water's included then the numbers would be lower and those numbers are somewhat lower than what I'm used to seeing because most of the data I can recall seeing is dry weight basis data.

Q. And what are the numbers, the dry weight numbers that you're used to seeing, roughly speaking?

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3:01:36 2 A. Again, there's some degree of  
3:01:38 3 variation just like what you see here, right,  
3:01:42 4 that kind of order of magnitude. I'm used to  
3:01:48 5 seeing numbers that are really about a range of  
3:01:56 6 finished sheet range of one to 1.3, roughly,  
3:01:56 7 again.

3:01:58 8 Q. How about --

3:02:00 9 A. From memory.

3:02:02 10 Q. Sure. And how about with respect to  
3:02:02 11 BL sheet?

3:02:06 12 A. BL sheet would be right about the  
3:02:12 13 same levels. I may have seen some data that  
3:02:16 14 tends to trend <sup>at</sup> ~~the~~ times a little bit lower than  
3:02:20 15 that in both cases, but roughly speaking, that's  
3:02:26 16 correct.

3:02:36 17 MR. ROGERS: Why don't we take five  
3:02:36 18 minutes.

3:02:38 19 MR. NUNLEY: Sure.

3:02:38 20 THE VIDEO OPERATOR: We're going off  
3:02:42 21 the record. The time on the screen is 3:02:37.

3:16:54 22 (A recess was taken.)

3:16:58 23 THE VIDEO OPERATOR: This is  
3:17:00 24 videotape number 4, the continuation of the  
3:17:04 25 deposition of Mr. Whitman. Today is August 14th,

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03:17:10 2 1995. The time on the screen is 3:17:20. You're  
03:17:10 3 on the record.

03:17:30 4 ~~MR. ROGERS: Would you mark this as~~  
03:17:30 5 ~~Exhibit 7.~~

6 (Whitman Exhibit 7 for  
7 identification, memorandum, from B. Esperdy to M.  
8 Young, production numbers <sup>2031437032</sup>~~2431437032~~ and PB  
9 110885.)

03:17:34 10 Q. Mr. Whitman, you've just been handed  
03:17:36 11 what's been marked Whitman Exhibit 7, which is a  
03:17:40 12 one-page document, a memo from B. Esperdy to M.  
17:42 13 Young. I'll direct your attention immediately to  
03:17:48 14 what appears to be your name in the list of ccs.  
03:17:52 15 The production number is <sup>2031437032</sup>~~2431437032~~ and the  
03:17:58 16 defendants' production number is PB 110885 and it  
03:18:02 17 bears a stamp reading highly confidential  
03:18:08 18 information. Am I right that that's your name on  
03:18:08 19 the list of ccs?

3:18:10 20 A. Yes.

3:18:12 21 Q. Do you recall receiving a copy of  
3:18:18 22 this memo the subject of which is nicotine  
3:18:20 23 determination of BL plant stems?

3:18:22 24 A. I really don't recall it.

8:26 25 Q. In July of 1987, remind me what your

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position was?

A. I was plant manager of the BL plant.

Q. Does this document refresh your recollection as to tests of the nicotine content of BL plant stems?

A. It really doesn't. Let me read it a little more carefully, Alex.

Q. Sure.

A. I really don't remember this.

Q. If I can direct your attention to the first sentence of the memo, "A set of three nicotine standards and two samples of Bright stems from the BL plant were analyzed by GC for nicotine content." What do you understand GC to mean?

A. Gas chromatograph is the first thing that comes to my mind.

Q. And what is gas chromatograph?

A. It's a QA analytical instrument.

Q. Is that the instrument that Philip Morris uses to measure nicotine content of its products?

A. I'm not really sure what the standard method is.

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03:20:06 Q. But that's one method that's used?

03:20:06 A. In this particular case that's what  
03:20:08 it says, yes.

03:20:08 Q. Do you know of any instances in which  
03:20:12 it's used in other cases to measure nicotine?  
03:20:14 And by this I mean the GC method?

03:20:20 A. Rephrase that question, I'm sorry.

03:20:20 Q. Sure. It appears from this document  
03:20:28 that nicotine content was analyzed by GC which  
03:20:32 you understand to mean gas chromatograph?

03:20:34 A. Gas chromatography.

20:38 Q. And I'm wondering whether or not  
03:20:40 you're familiar with any other instances in which  
03:20:44 GC was used to measure nicotine content, either  
03:20:44 BL stems or anything else?

03:20:48 A. I'm not sure. May have been, I don't  
18 know.

03:20:50 Q. You don't know one way or the other?

03:20:50 A. Right.

03:20:52 Q. And the reference to nicotine  
03:20:56 standards, capital letters N and S, what do you  
03:20:56 understand that to mean?

03:21:02 A. I honestly don't know.

21:04 Q. Who is B. Esperdy?

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03:21:12 2 A. I really don't know.

03:21:22 3 Q. You see the reference to the test  
03:21:26 4 results both for shredded stem and ground stem.  
03:21:30 5 Do you have any idea why they would be testing  
03:21:32 6 nicotine under both those scenarios?

03:21:32 7 A. I have no idea.

03:21:44 8 Q. Do you know who M. Young is?

03:21:48 9 A. At that particular time there was a  
03:21:50 10 Marvin Young who was employed within the QA  
03:21:52 11 department at the BL plant.

03:22:02 12 Q. And he fell under your supervision in  
22:04 13 your capacity as plant manager?

03:22:06 14 A. Not directly, but he worked for  
03:22:08 15 somebody who reported to me, yes.

03:22:18 16 Q. Are you aware of any other tests of  
03:22:24 17 BL raw materials for nicotine content?

03:22:32 18 A. The only data that I can recall is  
03:22:36 19 R&D data that was generated on the composite raw  
03:22:36 20 materials.

03:22:58 21 Q. Let me just return to an issue of  
03:23:00 22 terminology that we've touched on and if I've  
03:23:04 23 asked you I apologize, I'm still uncertain as to  
03:23:06 24 it. Would you consider the BL process part of  
23:12 25 the manufacturing process as that term is used by



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3:23:12 2 Philip Morris?

3:23:14 3 A. It's part of our manufacturing  
3:23:22 4 processes. I mean in other words, if I might  
3:23:24 5 expound a little bit maybe it would help clarify  
3:23:26 6 your difficulty.

03:23:26 7 Q. Okay.

03:23:30 8 A. I think when someone refers to  
03:23:32 9 manufacturing within Philip Morris U.S.A. it  
3:23:34 10 encompasses everything with regard to cigarette  
3:23:38 11 manufacturing and the processing plants.

3:23:42 12 Q. And so that would include BL?

23:44 13 A. Right.

03:23:46 14 Q. And RL?

03:23:48 15 A. But if you say manufacturing from a  
03:23:56 16 cigarette standpoint it does not include those.  
03:23:58 17 All right. In other words, the processing plants  
03:24:02 18 are a separate division from the manufacturing  
03:24:04 19 center, Cabarrus, et cetera.

03:24:10 20 Q. I see. And the blending, where does  
03:24:10 21 that occur?

03:24:14 22 A. Blending of what?

03:24:16 23 Q. What do you understand the term  
03:24:18 24 blending to mean?

24:22 25 A. It has several different connotations

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to me.

Q. What are some of those connotations?

A. Blending could refer to what's done in the first stage of the Park 500 operation in which the raw materials are blended together.

The same thing could apply to the relatively -- to like the second stage of the BL process.

Blending could also refer to what occurs in the primary operation at a cigarette manufacturing facility in which the Bright, Burley, Oriental and sheet components, et cetera, are blended together. So it's got several different connotations to me.

Q. Okay. And that final connotation of what occurs in the primary operation in which the Bright, Burley and Oriental sheet --

A. No, Oriental and sheet products.

Q. I'm sorry, Oriental and sheet. What's the time frame between the time that that blending occurs and a finished rod comes off the assembly lines?

A. A finished cigarette rod?

Q. Yes. Between that blending in the primary operation and finished cigarette?

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A. I'm not really the person closest to and most knowledgeable of to answer that question.

Q. If you had to estimate, roughly speaking?

A. Strictly as an estimate, it's within the same day.

Q. I see. So there's blending at the primary stage and then all that happens is the final processing to get it into the rod and to add a filter if that's what's done?

A. That's a --

MR. NUNLEY: Objection to that. I gotta object on the basis that that is such a simplistic view that it's -- I mean it's too vague to be -- I don't think you can characterize it in that way. I don't think, frankly, that you start primary and end with a cigarette rod. You start primary and end with the cut filler.

Q. All I want is what your estimation of what the time frame is between blending at primary and the finished rod and you've told me roughly a day?

A. As an estimate, right, as a

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guesstimate, all right, not a person who's responsible for that or familiar with exactly what the time frame is.

Q. What has to occur between the blending and the primary stage and the finished rod?

A. Exactly the types of things that Mr. Nunley was referring to. You've got to blend it, then eventually you have to cut it and you have to add the various flavor systems to it. Then you have to feed that material from some storage mechanism to the cigarette makers and packers.

Q. Am I correct that Philip Morris stores roughly two years worth of tobacco?

MR. NUNLEY: Objection as to form. When you say two years' worth, what do you mean?

Q. Enough to produce cigarettes for two years?

A. Are you referring to the inventory policies?

Q. Yes, storage.

A. I'm not sure. You'd have to ask the leaf department that question.

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Q. Before we return to your affidavit

which is Whitman Exhibit 3, I believe,, let's

turn to Page 2, paragraph 2 which falls under the

subheading "Overview of reconstituted tobacco."

In paragraph 2 you indicate that "Philip Morris

manufactures both RL and BL as a way of using

tobacco components such as tobacco stems, small

pieces of tobacco leaves and tobacco dusts that

are by-products of its manufacturing processes."

And if you skip to the final sentence in this

paragraph 2 it reads as follows: "Using these

previously unusable tobacco materials has reduced

the cost of making cigarettes by lowering the

overall cost of the tobacco." Is there any other

reason why Philip Morris manufactures RL, other

than what I take this sentence to mean, an issue

of economics?

A. That's the primary reason we have

those businesses.

Q. Are there any other reasons?

A. Not that I'm aware of.

Q. Would you agree that RL is a vehicle

for additives that otherwise couldn't be added

in, say, lamina?

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A. No.

MR. NUNLEY: Objection as to form.

Q. You could answer if you understand my question.

A. My answer was going to be not that I'm aware of.

Q. You mentioned that DAP is used in BL and RL. Is DAP added to --

A. Did I specifically mention that it was used in RL? I don't remember a question on BL, but the answer is yes, it is, so that's fine.

Q. Are there any other components of the cut filler to which DAP is added other than the RL or the BL?

A. I really don't know the answer to that question.

Q. Do you read tobacco trade publications?

A. Not as a rule.

Q. Have you?

A. Back at the time that I was at R&D back in the seventies I did, yes.

Q. Have you ever read any articles about the RL process in tobacco journals, trade

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journals?

A. I really don't recall any, Alex.

Q. Have you ever heard the name Donald Silberstein?

A. I believe so, yes.

Q. He worked for Kimberly-Clark; is that right?

A. That is correct.

Q. And he's involved in Kimberly-Clark's production of reconstituted tobacco?

A. He was at the time that I met him.

Q. And your contact with him, was that in reference to Philip Morris's consideration of purchasing sheet from Kimberly-Clark?

A. That's correct.

Q. Are you familiar with an article that Mr. Silberstein or Dr. Silberstein published entitled "Flavoring reconstituted tobacco"?

A. No, I'm not.

Q. During the time that Philip Morris was considering purchasing <sup>sheet</sup> ~~sheets~~ from Kimberly-Clark, did you speak regularly with Dr. Silberstein about the reconstitution process?

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3:32:44 2 MR. NUNLEY: Are you talking the  
3:32:46 3 '90/'91 time frame?

3:32:48 4 MR. ROGERS: Right.

3:33:02 5 A. I'm sorry, repeat the question.

3:33:02 6 Q. Sure. During the time that Philip  
3:33:04 7 Morris was considering purchasing sheet from  
3:33:08 8 Kimberly-Clark, did you speak regularly with  
3:33:10 9 Dr. Silberstein about the reconstitution process?

3:33:12 10 A. And again, the only time frame I'm  
3:33:16 11 aware of that, as Mr. Nunley has pointed out, was  
3:33:18 12 the '91 time frame. I talked with him on several  
33:24 13 occasions. Regularly is a relative term. It was  
3:33:26 14 not frequent, no. I don't even know that he has  
3:33:28 15 a Ph.D. That's the first I've heard of that.

3:33:30 16 Q. He might not. Maybe I've given him a  
3:33:34 17 degree that he hasn't earned yet. But in any  
3:33:42 18 event, you know the Silberstein that I'm  
3:33:42 19 referring to?

3:33:44 20 A. I've met him, yes.

3:33:46 21 Q. If you'll flip ahead in your  
3:33:48 22 *Exhibit 3* affidavit to paragraph 8, it falls under the  
3:33:52 23 subheading "The RL process," the first two  
3:33:54 24 sentences read as follows: "The blended leaf  
33:56 25 facility was able to meet Philip Morris's



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manufacturing needs until the early 1970s.

Around that time, Philip Morris decided to

acquire the technology that would enable it to

supplement its BL process with an RL process,

which was based on paper making technology."

From whom did Philip Morris acquire this  
technology?

A. From the Schweitzer Division of  
Kimberly-Clark.

Q. And where is the Schweitzer Division  
of Kimberly-Clark?

A. I'm not sure what the headquarters of  
that is.

Q. Is that the same method that LTR  
uses?

A. Yes, it is.

Q. And would you agree that at least  
with respect to lines 1 and 2 at Park 500 Philip  
Morris essentially uses the same process that LTR  
uses to make ~~could~~-reconstituted sheet?

MR. NUNLEY: Objection to the form.  
I think there has to be more of a foundation. On  
the status of the record I think that calls for  
speculation.

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Q. I asked you, Mr. Whitman, if Philip Morris uses the same method to produce reconstituted tobacco as LTR uses. Your answer is yes, it is the same. And what I'm wondering now is is your answer limited to lines 1 and 2 at Park 500 or does that include all three lines?

MR. NUNLEY: Alex, the basis of my objection is you talk about method which in my mind is more of a general term. Then you talk about specifically lines 1 and 2 and process. I think that in my mind at least is a much more specific term. I don't think you can go from a yes to the general to a yes to the specific. That's why I don't think you have the foundation for that question.

MR. ROGERS: Okay.

Q. When you answered yes to my question about the method of producing reconstituted tobacco that Philip Morris used -- uses, rather, and that LTR uses, what did you understand method to mean?

A. That the basic process that's used by Park 500 is the basic process <sup>that was</sup> ~~that's~~ used by LTR.

Q. And with respect to lines 1 and 2 is

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there anything different from what Philip Morris does from what LTR does in its method of producing reconstituted tobacco?

A. I'm really not a process expert on ~~an~~ <sup>the</sup> LTR process. There are things that from a quality standpoint that we've upgraded on the paper machine from a mechanical standpoint and so forth. You mean are there other differences and so forth, I have no idea.

Q. Could I ask you to elaborate on the specific differences to which you are aware?

Specifically you've said "We upgraded on the paper machine from a mechanical standpoint." How have you upgraded?

A. We've improved the dewatering mechanisms on the wire, that type of thing. Improved the distribution mechanism in the head box.

Q. Taking into consideration those upgrades, would you describe the method used on lines 1 and 2 to produce reconstituted tobacco as essentially the same which LTR uses?

MR. NUNLEY: Again, you're saying uses. He I think is testifying based on

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3:37:40 2 knowledge of the '77/'78 time frame. You're now  
3:37:42 3 bringing our line <sup>forward</sup> 24 years later and taking LTR  
3:37:44 4 <sup>forward</sup> 24 years later. I don't know what his state of  
3:37:48 5 knowledge as to LTR is today, but in my mind  
3:37:50 6 that's the basis of your question, not what it  
3:37:52 7 was 20 years ago, but what it is today.

3:37:54 8 Q. When you were answering my questions  
3:37:56 9 with respect to LTR, were you basing that on your  
3:37:58 10 knowledge 20 years ago?

3:38:02 11 A. I was basing it more on the  
3:38:04 12 perspective of you asked me the conversations  
3:38:06 13 with Silberstein and the potential for buying  
3:38:10 14 sheet. I was looking at it more from that time  
3:38:10 15 frame.

3:38:12 16 Q. And that was '90/'91?

3:38:12 17 A. That's correct.

3:38:14 18 Q. Let's take that time frame and let's  
3:38:20 19 take the same time frame for lines 1 and 2 at  
3:38:22 20 Park 500 and I want to ask taking into  
3:38:28 21 consideration those modifications that you've  
3:38:32 22 just described, would you describe the system in  
3:38:36 23 '91, 1990 to '91, the system that Philip Morris  
3:38:38 24 uses or the method to produce reconstituted  
3:38:40 25 tobacco as essentially the same as the method

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03:38:40 2 that LTR uses?

03:38:42 3 A. It's really a difficult question to  
03:38:48 4 answer and if I might, I'll try and elaborate on  
03:38:48 5 that.

03:38:48 6 Q. Please.

03:38:50 7 A. We did visit LTR in that time frame.  
03:38:52 8 They wouldn't even let us see the stock  
03:38:54 9 preparation side of the business, so I can't even  
03:38:58 10 draw any conclusion on that entire phase from a  
03:39:04 11 blending through to the paper machine. From the  
03:39:06 12 paper machine some of the things I've just  
03:39:08 13 mentioned to you, Alex, are basically differences  
03:39:10 14 that I saw when I looked at that paper machine.

03:39:54 15 ~~MR. ROGERS: Would you mark this as~~  
03:39:54 16 ~~Exhibit 8.~~

17 (Whitman Exhibit 8 for  
18 identification, article by Donald A. Silberstein  
19 entitled "Flavoring reconstituted tobacco,"  
20 production numbers B 102084 through B 102086.)

03:39:56 21 Q. Mr. Whitman, you've just been handed  
03:40:14 22 what's been marked as Whitman Exhibit 8, an  
23 article by Donald A. Silberstein entitled  
24 "Flavoring reconstituted tobacco." It bears  
25 only defendants' production numbers of B 102084

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03:40:22 2 through B 102086. And the reference to the  
03:40:24 3 author Donald Silberstein, is that the same  
03:40:28 4 Donald Silberstein, do you believe, that we've  
03:40:28 5 been talking about?

03:40:32 6 A. Is there a biographical sketch in  
03:40:32 7 here?

03:40:34 8 Q. I don't see one in this article. You  
03:40:36 9 can ~~see~~<sup>tell</sup> right from the abstract that he's talking  
03:40:40 10 about the LTR process for manufacturing  
03:40:50 11 reconstituted tobacco. But if you can't be sure,  
03:40:50 12 I'll certainly understand that.

40:52 13 A. I can't be just from that.

03:40:54 14 Q. If I can ask you --

03:40:56 15 A. May I add that I met Mr. Silberstein  
03:41:02 16 in this country, and so I'm not sure based on  
03:41:02 17 what I'm seeing here.

03:41:04 18 Q. Are there any differences in the  
03:41:08 19 methods used, and let's stay with this 1990 to  
03:41:12 20 '91 time frame, the methods used by LTR and the  
03:41:16 21 methods used by Kimberly-Clark here in the United  
22 States?

03:41:28 23 A. I'm not even sure of the answer to  
03:41:30 24 that one, Alex, from the same limitation. They  
41:34 25 would not show us the stock preparation end of

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03:41:38 2 the business. The paper machines, from my  
03:41:42 3 recollection, were similar to the LTR paper  
03:41:42 4 machine.

03:41:54 5 Q. And when you say the paper machine,  
03:41:58 6 would you describe that as sort of a two-step  
03:42:02 7 process, you know, in simplistic terms, of  
03:42:04 8 course, but of simply removing solubles and then  
03:42:06 9 reapplying solubles?

03:42:06 10 MR. NUNLEY: No.

03:42:08 11 A. No, no.

03:42:08 12 Q. Okay.

42:10 13 A. The paper machine is limited to the  
03:42:14 14 physical process of forming the sheet.

03:42:16 15 Q. Okay.

03:42:20 16 A. So I include in that through the time  
03:42:26 17 that the sheet comes off of the Yankee dryer  
03:42:30 18 surface and feeds to the can dryer section. So  
03:42:40 19 you're basically talking Fourdrinier<sup>wire</sup> et cetera.

03:42:44 20 MR. NUNLEY: John, can you spell that  
21 for the reporter.

03:42:52 22 A. F-o-u-r-d-r-i-n-i-e-r.

03:42:56 23 Q. If I can direct your attention to the  
03:43:00 24 chart or the graph on the first page of this  
43:04 25 exhibit, figure 1, basic flow chart of the LTR

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2 and then in parentheses Kimberly-Clark process.  
3 Looking at that flow chart in general terms, is  
4 that similar to a flow chart of this degree of  
5 generality for Park 500?

6 MR. NUNLEY: Objection as to form. I  
7 don't know what you mean by this "degree of  
8 generality."

9 MR. ROGERS: I simply mean --

10 MR. NUNLEY: Is there a flow chart of  
11 this type for Park, is that the question?

12 MR. ROGERS: I didn't hear you?

13 MR. NUNLEY: Is there a flow chart of  
14 that level of simplicity for Park?

15 MR. ROGERS: No.

16 Q. I was simply saying looking at that  
17 flow chart as a description of the basic LTR  
18 Kimberly-Clark process does that seem similar to  
19 the Philip Morris process for producing  
20 reconstituted tobacco?

21 MR. NUNLEY: Objection as to form.

22 A. I mean with the stipulation that it's  
23 overly simplistic and so forth and you have a  
24 copy of the flow chart I attached to the  
25 affidavit, I mean yes, it appears to be a



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basically oversimplified RL process.

Q. It appears in this figure water is combined with natural tobacco products. There is an extraction process and then there is an aqueous extract on one side and a fibrous fraction on the other and ultimately there is, according to this document, a sheet of customized reconstituted tobacco. In general terms, that also accurately describes Philip Morris's process for making reconstituted tobacco; is that correct?

A. In generalized terms, that would be correct.

Q. And I understand your affidavit expands upon that and provides much greater detail. I'm just asking for the basic framework. That's by and large the same?

A. Yeah, from a basic framework standpoint I would say so.

Q. And when you use --

A. I would change some of the terminology, but that's fine.

Q. And when you say in paragraph 8 of your affidavit that Philip Morris decided to

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"acquire the technology," what technology specifically did Philip Morris acquire?

A. I was not involved in that, but my understanding is that they licensed the process from the Schweitzer Division of Kimberly-Clark.

Q. And what do you mean by the process?

A. The existing RL process as you see it formatted on the attachment to the affidavit.

Q. And so what's described in your affidavit is a process that is similar, if not identical, to the Schweitzer Division process?

MR. NUNLEY: Objection as to form.

A. Again, now you're going to identical and I can't make that statement.

Q. It's modeled after the Schweitzer Division?

A. Certainly the paper machine itself and -- the answer to that is yes.

Q. Let's turn back to the BL process that begins on Page 3. I want to direct your attention to paragraph 6, read the first two sentences and ask you a question: "The ammonia compounds, flavors, and humectants and

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03:46:56 2 preservatives added in the BL process do not  
03:47:00 3 contain any nicotine. The ammonia compounds are  
03:47:02 4 used as a processing aid to convert naturally  
03:47:06 5 occurring pectin and tobacco into a water soluble  
03:47:10 6 form." By ammonia compounds, do you mean DAP?

03:47:14 7 A. The aqueous ammonia. Specifically  
03:47:16 8 DAP may aid in that, I'm really not sure.

03:47:20 9 Q. Is DAP an ammonia compound?

03:47:22 10 A. DAP is an ammonia compound. It  
03:47:24 11 contains ammonia.

03:47:30 12 Q. I'm still not sure then. What do you  
47:32 13 mean by ammonia compounds in this sentence?

03:47:34 14 A. You're adding, in addition to DAP,  
03:47:38 15 you're also adding aqueous ammonia, what might  
03:47:42 16 commonly or might be referred to by a chemist as  
03:47:44 17 ammonium hydroxide.

03:47:48 18 Q. Is urea also an ammonia compound?

03:47:58 19 A. My organic chemistry is failing at  
03:48:00 20 this particular point, but I believe a chemist  
03:48:04 21 would typify it at that, but you'd have to ask a  
03:48:04 22 chemist.

03:48:08 23 Q. Okay. Is urea added in the BL  
03:48:08 24 process?

48:08 25 A. No, it is not.

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Q. Other than the DAP and aqueous ammonia that you've described as ammonium hydroxide, are there any other ammonia compounds added in the BL process?

A. No, there are not.

Q. And you described the purpose of these compounds as "a processing aid to convert naturally occurring pectin <sup>in</sup> ~~and~~ tobacco into a water soluble form." Would you explain the significance of that?

A. My understanding of that mechanism from dealing with R&D is that the pectin is in an insoluble form, calcium pectate. The ammonia solubilizes that material, forms an ammonium pectate compound. That acts as the binder to hold the sheet together and then when you drive off the ammonia during the drying process the calcium pectin reform -- reverts to its insoluble calcium pectate state.

Q. So it facilitates sheet formation; is that fair?

A. That's correct, by holding the sheet together.

Q. And when you say you drive off the

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3:49:24 2 ammonia during the drying process, are you able  
3:49:28 3 to dry off all of the ammonia or is some left  
3:49:28 4 behind?

3:49:32 5 A. There's a low residual but I can't  
3:49:32 6 remember what that number is.

3:50:12 7 Q. Are there any other reasons why  
3:50:16 8 ammonia compounds are used in the BL process  
3:50:20 9 other than as a processing aid to which you've  
3:50:20 10 just described?

3:50:22 11 A. It was my understanding that the DAP  
3:50:26 12 was added as a subjective additive also.

50:32 13 Q. What DAP's contribution to the  
3:50:32 14 subjectives?

3:50:38 15 A. I have no idea.

3:50:42 16 Q. Who would know the answer? Who would  
3:50:42 17 you ask?

3:50:46 18 A. Product development people.

3:50:54 19 Q. Do you know what effect DAP or  
3:50:58 20 ammonia hydroxide has on the pH level of the BL?

3:51:10 21 A. The <sup>ammonium</sup>~~ammonia~~ hydroxide would have a  
3:51:14 22 tendency to raise the pH level.

3:51:16 23 Q. And that's because ammonium hydroxide  
3:51:18 24 is a base?

51:18 25 A. That's correct.

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03:51:20 2 Q. Is Philip Morris concerned at all  
03:51:22 3 with the pH level of its BL product?

03:51:28 4 A. From what standpoint?

03:51:30 5 Q. I mean is that a parameter that is  
03:51:36 6 tested for, pH of tobacco?

03:51:38 7 MR. NUNLEY: PH of tobacco or pH of  
03:51:40 8 final sheet?

03:51:40 9 MR. ROGERS: Let's take the final  
03:51:42 10 sheet.

03:51:46 11 A. I don't even remember seeing pH data  
03:51:48 12 on final sheet.

52:02 13 ~~MR. ROGERS: Would you mark this as~~  
03:52:06 14 ~~Exhibit 9.~~

15 (Whitman Exhibit 9 for  
16 identification, document entitled "Blended leaf  
17 facility," production numbers 2031160265 through  
18 2031160269 and PA 368944 through PA 368948.)

03:52:26 19 Q. You've just been handed what's been  
03:52:50 20 marked as Whitman Exhibit 9, which is a document  
21 entitled "Blended leaf facility." The production  
22 numbers are 2031160265 through 2031160269. The  
23 corresponding defendants' numbers are PA 368944  
03:52:52 24 through PA 368948, and there are two stamps on  
52:56 25 this document, one indicates that the -- on the

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3:52:58 2 first page of the document it contains trade  
3:53:00 3 secret information and the second stamp is marked  
3:53:04 4 confidential.

3:53:06 5 Have you ever seen this document  
3:53:08 6 before, Mr. Whitman?

3:53:08 7 A. Not to my knowledge.

3:53:14 8 Q. If I could ask you to turn to the  
3:53:18 9 second page, you'll see a subheading  
3:53:22 10 "Ingredients" and let's just go down that list.  
3:53:26 11 First, the document indicates that "Tobacco  
3:53:28 12 products, Burley stem and selected class tobacco  
53:32 13 dust accounts for 88 percent of the finished  
3:53:34 14 sheet. The remaining 12 percent is made up from  
3:53:38 15 the following additives." And then there's a  
3:53:42 16 list of additives on this page. The first one is  
3:53:44 17 diammonium phosphate which we've talked about.  
3:53:48 18 And there's a brief description. Underneath it  
3:53:50 19 it says a sequestering agent that releases  
3:53:52 20 pectin. I take it that's what you're referring  
3:53:54 21 to in paragraph 6 of your affidavit?

3:53:58 22 A. That the ammonium compounds release  
3:54:00 23 the pectin, that's correct.

3:54:04 24 Q. And then the second item on this page  
54:08 25 is ammonia hydroxide which is listed as a pH

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3:54:12 2 control agent. What do you understand that to  
3:54:12 3 mean?

3:54:16 4 A. Well, obviously even in my previous  
3:54:18 5 answer to you, my understanding of the fact is  
3:54:20 6 slightly different than this, but that's what I  
3:54:24 7 was told from an R&D standpoint, that the  
3:54:32 8 ammonium hydroxide is also an aid in releasing  
3:54:36 9 the pectin. And as a pH control agent, I'm  
3:54:38 10 unfamiliar with that completely.

3:54:42 11 Q. But your testimony is that the  
3:54:44 12 addition of ammonium hydroxide, all things being  
54:46 13 equal, would increase the pH level?

3:54:48 14 A. All other things being equal.

3:54:52 15 Q. Have you ever heard any desire on the  
3:54:56 16 part of anyone at Philip Morris to increase the  
3:55:00 17 pH level of any of its products?

3:55:00 18 MR. NUNLEY: I think you're making a  
3:55:06 19 leap that is not supported by his testimony. I  
3:55:08 20 think he said most of the ammonia is driven off  
3:55:12 21 in the process. I don't know whether this pH  
3:55:14 22 control refers to in process or finished sheet.

3:55:16 23 MR. ROGERS: I don't think the  
3:55:20 24 document makes that clear, Chip. I'm just  
55:22 25 simply, in describing how ammonia was driven off,



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he did indicate there was some residual ammonia left over. I'm simply asking now whether he's ever heard anybody talk about at Philip Morris a desire to increase the pH level of any of its products?

A. No.

Q. Do you know whether there's any relationship between pH level of tobacco and nicotine delivery?

A. I have no idea.

Q. You mentioned earlier today the Surgeon General's report of 1988, was that the one you were referring to?

A. No, I don't think I referred to a Surgeon General's report. I simply, if my memory serves me correctly, referred to my recollection of Dr. Koop making certain comments, but not a specific report.

Q. Have you ever seen any documents describing a relationship between pH level and nicotine delivery?

A. No, I've not.

Q. You indicate in your description of the BL process, and I'll give you the <sup>site</sup> ~~site~~,

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03:57:32 2 paragraph 7, "No nicotine is added from any  
03:57:34 3 source in the manufacture of BL. The only  
03:57:38 4 nicotine in the BL sheet comes from the tobacco  
03:57:42 5 raw materials that are used to make the sheet.  
03:57:44 6 During the formation of the BL sheet nicotine  
03:57:46 7 present in the tobacco materials is lost as a  
03:57:52 8 result of both processing and drying." How do  
03:57:56 9 you know that to be the case, nicotine lost?

03:57:58 10 A. I've seen data from back at the time  
03:58:02 11 that I was the plant manager in which we ran  
03:58:04 12 composite samples.

58:08 13 Q. And we talked about --

03:58:14 14 A. R&D, by the way. R&D ran those  
03:58:14 15 samples for us.

03:58:16 16 Q. We talked about a different section  
03:58:20 17 of this affidavit referencing between 15 and 20  
03:58:22 18 percent nicotine loss in RL. Do you know what  
03:58:26 19 the data is for nicotine loss in BL?

03:58:28 20 A. Not off the top of my head, no.

03:58:38 21 Q. Would you think it would be more or  
3:58:40 22 less?

3:58:42 23 MR. NUNLEY: Objection; calls for  
3:58:42 24 speculation.

58:44 25 A. I don't know without looking at data.

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3:59:02 2 Q. Let's turn to paragraph 9. We're now  
3:59:06 3 into your description of the RL process. "The  
3:59:08 4 first step in making RL is separation of the  
3:59:10 5 substances in the tobacco raw materials that are  
3:59:14 6 soluble in water (the 'solubles') from the  
03:59:22 7 insolubles (the 'fibers'). The solubles  
03:59:24 8 constitute approximately 50 percent of the weight  
03:59:26 9 of the tobacco materials. The solubles contain  
03:59:30 10 thousands of compounds found in the tobacco  
03:59:34 11 plant, only one of which is nicotine." If you  
03:59:38 12 turn the page. "Indeed, nicotine is only a small  
59:40 13 part of the solubles." How do you know that to  
03:59:40 14 be the case?

03:59:42 15 A. Again, from R&D test data that I've  
03:59:44 16 seen.

03:59:46 17 Q. The R&D test data from July of '95  
03:59:48 18 that you referred to earlier or different data?

03:59:52 19 A. Certainly the July data would show  
03:59:54 20 that, yes.

03:59:56 21 Q. Is that the only data on which you  
03:59:56 22 base this statement?

04:00:06 23 A. As refers to the specific solubles  
04:00:12 24 analysis per se, yes. But by inference, if you  
00:14 25 know the nicotine content of the raw materials

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and you know the solubles content from any of the other prior samples, then you would know what the percentage was in the solubles from that.

Q. If you hadn't reviewed that July 1995 data, would you have made the same statement?

A. Oh, absolutely.

Q. And on what would you have based that?

A. That inferential association I just described.

Q. But they would have been just that, inferences?

A. Reasonable scientific analysis.

Q. And this data was concrete evidence to confirm that?

A. Oh, absolutely.

Q. Let's turn to paragraph 10: "The separation of the tobacco solubles and tobacco fibers begins in a tank called the pulper, where tobacco materials are mixed with water and agitated. For environmental and economic reasons the water that's used in the RL process, including in the pulper is principally recycled water. That recycled water, which consists of a

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mixture of weak extracted liquor, WEL 3 and rich brown water, RBW, is derived from subsequent steps in the RL process." Let me stop there. Is that the only water that's added to the pulper, the rich brown water and the WEL 3?

A. Under steady state conditions.

Q. What do you mean by steady state conditions?

A. Well, if you're involved in a cold startup, the plant's been shut down for preventive maintenance shutdown and you're starting up from scratch, in other words, then you'd use straight process water.

Q. What is straight process water?

A. Water that's derived from our water treatment plant that's on site.

Q. And this occurs when there is a plant shut down. How about if there's been a line shutdown, one line, say, shut down for some reason, started back up again?

A. Been shut down for half an hour, an hour or shut down for a prolonged period of time, a week, whatever.

Q. Would that period of shutdown change

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04:02:44 2 your answer?

04:02:50 3 A. Yeah, if -- if what you had was a  
04:02:52 4 mechanical failure that required a one-hour  
04:02:54 5 shutdown, for example, you'd still have  
04:02:58 6 inventories of all the materials, fiber and  
04:03:00 7 solubles. So when you start it back up you go  
04:03:04 8 not instantaneously, but close to that back to  
04:03:08 9 steady state conditions. And so the water being  
04:03:12 10 returned to the pulper would normally be RBW and  
04:03:20 11 WEL 3. If it was a several day shutdown even the  
04:03:26 12 answer to your question is no, it would be fresh  
03:28 13 water or process water that would be used.

04:03:30 14 Q. Is there any other water other than  
04:03:36 15 the process water or the WEL 3 and the rich brown  
04:03:40 16 water that's ever added to the pulper under any  
04:03:40 17 circumstance?

04:03:42 18 A. Not to my recollection.

04:03:46 19 Q. Do you know of any instances in which  
04:03:50 20 SEL is added to the pulper?

04:03:52 21 A. SEL?

04:03:54 22 Q. Yes.

04:03:54 23 A. No.

04:03:54 24 Q. Do you know what SEL is?

03:58 25 A. Strong extract liquor. It's the

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04:04:02 2 liquor discharged from the first stage process.

04:04:06 3 Q. And you can think of no instance in  
04:04:10 4 which SEL has ever been added to the pulper?

04:04:10 5 A. Not that I'm aware of.

04:04:20 6 Q. Do you know who William Estes is?

04:04:20 7 A. Yes.

04:04:20 8 Q. Who is he?

04:04:26 9 A. Bill's an employee of Park 500. He's  
04:04:26 10 held various positions.

04:04:28 11 Q. Do you know what his current position  
04:04:28 12 is?

04:30 13 A. He's a process control coordinator.

04:04:32 14 Q. Would he be in a position --

04:04:34 15 A. Excuse me.

04:04:34 16 Q. Sure.

04:04:42 17 A. He's a shift coordinator.

04:04:42 18 Q. At Park 500?

04:04:42 19 A. Yes.

04:04:44 20 Q. And would he be in a position to know  
04:04:46 21 what goes in the pulper?

04:04:54 22 A. Today?

04:04:56 23 Q. Sure. Is that something that falls  
04:04:58 24 within his area of work?

05:02 25 A. Yeah, I mean he's responsible for

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04:05:06 2 monitoring processing operations on the back

04:05:08 3 shifts on the weekends, so sure.

04:05:10 4 Q. That would include the pulper?

04:05:12 5 A. Yeah. But only -- normally in his

04:05:14 6 particular regard from the standpoint if there

04:05:16 7 were operational problems and so on and so

04:05:20 8 forth. That's what that position is there for.

04:05:22 9 Q. And by operational problems you mean

04:05:26 10 problems that could lead to a shutdown, say?

04:05:28 11 A. Yes, or have led to a shutdown.

04:05:34 12 Q. In startup situations following a

05:40 13 shutdown, is it your testimony that SEL has never

04:05:42 14 been added to the pulper or that you simply don't

04:05:42 15 know?

04:05:46 16 A. To my knowledge, I've never seen that

04:05:46 17 done.

04:05:52 18 Q. How about if the -- does Philip

04:05:54 19 Morris test the soluble content of the SEL?

04:05:58 20 A. Yes, we do.

04:06:00 21 Q. And percentagewise SEL will have

04:06:04 22 greater percentage of solubles than WEL 2 or WEL

04:06:04 23 3?

04:06:06 24 A. That's correct.

06:10 25 Q. Are there instances -- is there a



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04:06:12 2 target soluble level for the SEL?

04:06:22 3 A. Strictly from recall yes, I believe  
04:06:24 4 there is because it's a <sup>measurement</sup> ~~measure~~ of press  
04:06:26 5 efficiency.

04:06:28 6 Q. And would I be right that the target  
04:06:30 7 would be somewhere around 8 percent?

04:06:32 8 A. I really don't remember.

04:06:38 9 Q. What happens if the SEL doesn't  
04:06:40 10 measure up to whatever that target level is,  
04:06:46 11 meaning soluble content is lower than that which  
04:06:46 12 is desired?

06:58 13 A. I'm really not sure, Alex. I mean I  
04:07:04 14 would assume that if it's high enough to be used  
04:07:06 15 in the evaporator feed tank it would be cleaned  
04:07:08 16 and fed to that operation.

04:07:12 17 Q. But if it's not high enough?

04:07:18 18 A. It would probably, and again that's  
04:07:28 19 probably, be discharged to waste <sup>treatment</sup> ~~stream~~ it.  
04:07:30 20 Again, I haven't seen an example so I really  
04:07:32 21 don't --

04:07:34 22 Q. You're not sure?

04:07:36 23 A. Right.

04:07:40 24 MR. NUNLEY: Alex, how are we doing  
07:42 25 on time? We're after four now.

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4:07:44 MR. ROGERS: I'd like to go for a  
4:07:46 little while. I notice we didn't get started,  
4:07:52 for a variety of reasons, until about <sup>9:30 or so.</sup> ~~9:25~~, so if  
4:07:56 we could go for 15 or 20 minutes, if that's all  
4:08:00 right with you, Mr. Whitman, we can save sometime  
04:08:04 tomorrow. I'd like to see if we can shoot for  
04:08:06 4:30.

04:08:06 MR. NUNLEY: What's your view, half  
04:08:08 day tomorrow?

04:08:08 MR. ROGERS: I don't know.

04:08:12 MR. NUNLEY: We did start at 9:20,  
08:14 9:30, but we were here at nine.

04:08:16 MR. ROGERS: I understand that. I'd  
04:08:18 like to go for a few more minutes today and pick  
04:08:22 up tomorrow and if we can finish up early, I  
04:08:24 think it's in everyone's interest, given all the  
04:08:26 other demands in this case, that we don't prolong  
04:08:30 it a minute longer than it needs to be. Are you  
04:08:32 comfortable going a few more minutes today?

04:08:34 MR. NUNLEY: An hour of office time  
04:08:36 is pretty valuable. We lose at the front end if  
04:08:40 we start at nine. If we lose at the back end  
04:08:42 there's really no impetus to start at nine  
08:46 o'clock. But, if you want to go ahead, go

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04:08:46 2 ahead.

04:08:48 3 Q. Why don't we finish this area that  
04:08:50 4 we're talking about and then we can conclude.

04:08:50 5 A. That's fine.

04:08:56 6 Q. We were talking about instances in  
04:08:58 7 which the SEL doesn't have the target level of  
04:09:04 8 solubles. Is it possible that SEL that doesn't  
04:09:10 9 have the target level of solubles is added to the  
04:09:12 10 pulper?

04:09:14 11 MR. NUNLEY: Calls for speculation.  
04:09:16 12 He said based on his experience he's never known  
09:16 13 it to happen.

04:09:18 14 Q. And now I'm asking you to think of  
04:09:20 15 that situation and whether or not --

04:09:22 16 MR. NUNLEY: To speculate on that?

04:09:24 17 MR. ROGERS: Well, if it's an  
04:09:26 18 impossibility, if it's a physical impossibility  
04:09:28 19 for SEL to be added to the pulper he could say  
04:09:32 20 that, if it's not, he can say that. If he  
04:09:32 21 doesn't know he can say it.

04:09:34 22 Q. I simply asked the question is it  
04:09:36 23 possible for SEL that doesn't have the target  
04:09:40 24 level solubles to be added to the pulper?

09:42 25 A. It's strictly a speculative answer.

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Is it possible? Sure. But if that's the case then it's not really SEL.

Q. What do you mean by that?

A. If SEL is strong extract liquor and what you're saying to me is that, hypothetically, you've run material through that first stage press, there's something wrong with the press, let's say, for the sake of argument, and so instead of coming out at whatever that target level is, you've come out at one-fourth of that target level, it's not SEL.

Q. Okay.

A. It's some form of weak extract liquor at that point.

Q. And what if instead of a problem with the press it was a result of low soluble levels in the raw material, would your answer be the same?

A. I don't think that, again, strictly from a speculative, hypothetical situation I would find it difficult to believe that it would be because of the raw materials per se if the raw materials were blended in the proper proportion.

Q. Okay. You indicated earlier today

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4:10:56 2 that because tobacco's an agricultural product in  
4:11:00 3 terms of region or climate, that soluble content  
4:11:00 4 could vary?

4:11:04 5 A. Sure. But to get to that great a  
4:11:12 6 spread that would be in excess of variation from  
04:11:14 7 my experience.

04:11:16 8 Q. And is it your testimony that what  
04:11:20 9 comes out of the first press on the soluble side  
04:11:24 10 wouldn't be called SEL if it didn't have the  
04:11:26 11 target level of solubles?

04:11:30 12 A. Within reason, and again that's --  
11:32 13 I've never seen an incident in that particular  
04:11:34 14 regard. You asked me to speculate on what I  
04:11:38 15 would think and my answer is is that from a  
04:11:42 16 purely speculative, hypothetical point of view,  
04:11:44 17 if it's significantly less than what that target  
04:11:46 18 level is then it's not really SEL.

04:11:50 19 Q. And in addition to these ingredients  
04:11:56 20 that you mentioned, RBW and WEL 3 in the pulper,  
04:12:00 21 am I right that broke is also added to the  
04:12:00 22 pulper?

04:12:04 23 A. Broke as it's fed back could be added  
04:12:04 24 to the pulper, yes.

12:08 25 Q. Could be or is it in fact added?

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4:12:10 2 A. If there's broke available, right.

4:12:12 3 Q. That's where it goes, into the  
4:12:12 4 pulper?

4:12:14 5 A. Yeah. If there's broke available.

4:12:14 6 Q. What is broke?

4:12:18 7 A. It's waste material from startup of  
4:12:22 8 the machine or from startup from the paper  
4:12:26 9 machine or of startup from the tunnel dryer which  
4:12:28 10 the finished sheet is processed back through.

4:12:30 11 Q. And what do you mean by waste  
4:12:32 12 material?

4:12:36 13 A. It may not meet the finished  
4:12:40 14 specification. In the case of finished sheet it  
4:12:42 15 may not meet the specifications relative to  
4:12:46 16 additive levels and so forth. In the case of at  
4:12:50 17 the size press, it's basically base web that  
4:12:52 18 doesn't have any of the flavors or solubles  
4:12:52 19 reapplied to it.

4:12:56 20 Q. I see. If you have --

4:12:58 21 A. The machine hasn't been totally  
4:13:00 22 strung up.

4:13:00 23 Q. You would just bring it back and  
4:13:02 24 stick it in the pulper?

3:04 25 A. Yes. It would go to the broke pulper

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4:13:06 2 and that material would be fed back to the  
4:13:08 3 pulper.

4:13:12 4 Q. You mentioned it may not meet "the  
4:13:16 5 finished specification." Am I right that one of  
4:13:18 6 the finished specifications is the soluble  
4:13:18 7 content?

4:13:20 8 A. Sure.

4:13:22 9 Q. How far out of range does the sheet  
4:13:26 10 have to be in order to be called broke instead of  
4:13:26 11 finished sheet?

4:13:30 12 A. If it's below the level that you see  
13:30 13 there.

4:13:34 14 Q. How often does that occur?

4:13:36 15 A. Infrequently.

4:13:38 16 Q. Roughly speaking what would you say?

4:13:48 17 A. Normally occurs on startup situations  
4:13:50 18 a few times a year.

4:14:06 19 Q. Are there any other sources for broke  
4:14:10 20 other than the two that you've described, the  
4:14:12 21 finished sheet that doesn't meet specifications  
4:14:14 22 and the base web to which solubles haven't been  
4:14:16 23 applied?

4:14:16 24 A. No.

14:24 25 MR. ROGERS: Why don't we pick up

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2 here.

04:14:24 3 MR. NUNLEY: Great.

04:14:26 4 THE VIDEO OPERATOR: We're going off  
04:14:30 5 the record. This ends videotape number 4. The  
04:14:30 6 time on the screen is 4:14:42.

04:14:38 7 (Time noted: 4:14 p.m.)  
8  
9

10   
11 JOHN M. WHITMAN

12 Subscribed and sworn to before me  
13 this 25<sup>th</sup> day of October, 1995.

14 Beth F. Jones, Notary  
15 My Commission Expires 10-31-97  
16  
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C E R T I F I C A T E

STATE OF NEW YORK )

: ss.

COUNTY OF NEW YORK )

I, GAIL F. SCHORR, a Certified  
Shorthand Reporter and Notary Public within and  
for the State of New York, do hereby certify:

That JOHN M. WHITMAN, the witness  
whose deposition is hereinbefore set forth, was  
duly sworn and that such deposition is a true  
record of the testimony given by the witness.

I further certify that I am not  
related to any of the parties to this action by  
blood or marriage, and that I am in no way  
interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto  
set my hand this 17th day of August, 1995.

Gail F. Schorr

GAIL F. SCHORR, C.S.R.

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E X H I B I T S

DESCRIPTION PAGE LINE

(Whitman Exhibit 1 for identification, document entitled "C&I closeout report," production numbers 2025323903 through 2025323921 and PA 315999 to PA 316017)... 120 7

(Whitman Exhibit 2 for identification, document entitled "Philip Morris, Incorporated's answers to American Broadcasting Companies' first set of interrogatories.")..... 138 14

(Whitman Exhibit 3 for identification, affidavit of John M. Whitman.)..... 140 19

(Whitman Exhibit 4 for identification, Philip Morris, Incorporated's supplemental answers to American Broadcasting Companies first set of interrogatories.)..... 160 16

(Whitman Exhibit 5 for identification, memorandum, to M.B. Maher, from W.H. Bailey, dated October 31, 1989, production numbers 2030351524 through 2030351527 and PA 146172 through PA 14175.)..... 185 25

(Whitman Exhibit 6 for identification, memorandum, to distribution, from Bobbi Jeter, dated April 21, 1992, production numbers 2030961055 through 2030961060 and PA 473457 through PA 473462.)..... 190 23

(Whitman Exhibit 7 for identification, memorandum, from B. Esperdy to M. Young, production numbers 2431437032 and PB 110885.)..... 200 5

(Whitman Exhibit 8 for identification, article by Donald A. Silberstein entitled "Flavoring reconstituted tobacco," production numbers B 102084 through B 102086.)..... 216 16

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**E X H I B I T S: (Continued)**

**DESCRIPTION** **PAGE LINE**

(Whitman Exhibit 9 for identification,  
document entitled "Blended leaf  
facility," production numbers  
2031160265 through 2031160269 and PA  
368944 through PA 368948.)..... 225 14

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Thu Aug 17, 1995

Keyword: (INSERT  
Not Found.

Keyword: DIR  
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Keyword: REQ  
[158,14]      **REQ** MR. ROGERS: Chip, with respect to  
[159,4]       **REQ** MR. ROGERS: And with respect to the  
[159,14]      **REQ** MR. ROGERS: And so as not to

Keyword: RUL  
Not Found.

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